

BC's Natural Gas Exports

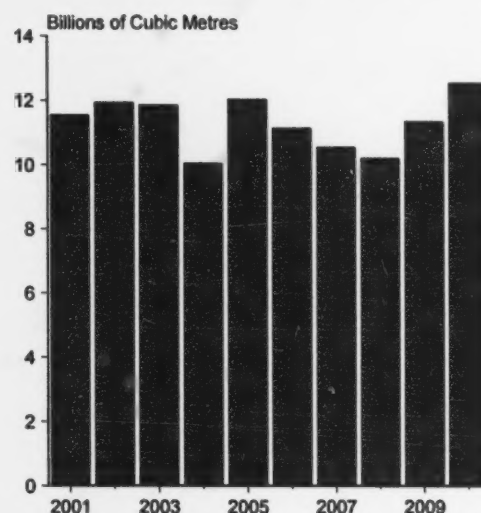
Natural gas has long been one of B.C.'s top exports, but in recent years, erratic pricing has affected the value of gas exported from the province. The quantity of natural gas exported from the province has shown some marginal fluctuations over the last decade, but on the whole, demand for B.C.'s natural gas has remained reasonably steady. However, due to some strong price swings, the value received for the natural gas exported from B.C. has undergone much more variation.

Natural gas prices spiked in 2005 when hurricanes Katrina and Rita disrupted the supply from the U.S. Gulf of Mexico. Prices fell for a couple of years after that before jumping up again in 2008 as record oil prices created demand for alternative energy supplies. In the last two years, prices have been trending down as new discoveries have increased the North American supply of gas and have created somewhat of a glut on the market.

Specifically, major discoveries of shale gas reserves, such as the one in the Horn River Basin in Northeast British Columbia, combined with technological improvements in extraction methods that have made it more economical to extract shale gas, have resulted in supply that exceeds the demand for gas in North America. Consequently, prices for natural gas have dropped sharply.

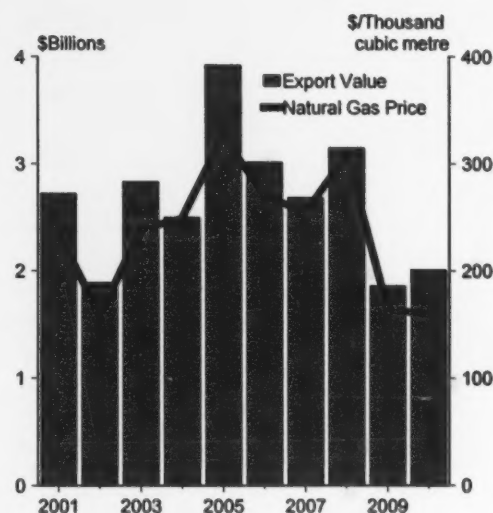
The problem for producers of natural gas is that in order to ship the commodity to destinations outside of North America, the gas has to first be liquefied. Currently, there is only one natural gas liquefaction facility in North America and that facility is set to close later this year.

The quantity of natural gas exported from BC has remained fairly steady over the last decade...



Source: Statistics Canada

...but the price of natural gas has varied significantly, which has affected the value of natural gas exports



Source: Statistics Canada

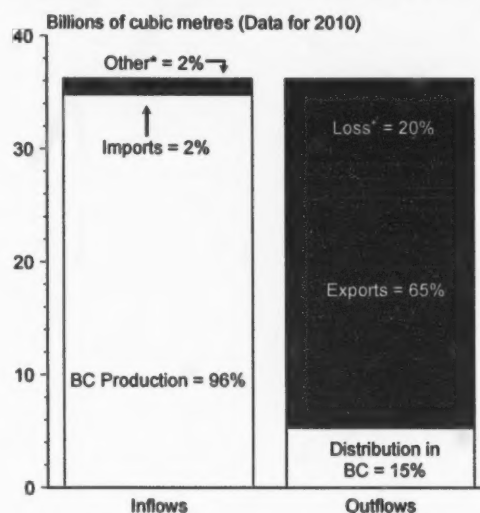
The facility in Alaska is fairly small and serves mainly the Japanese market. The plan is to shut the plant down in August. The reason given for the closure is competition from other suppliers, particularly Australia and Malaysia, which has driven the price below that needed to remain profitable. Once this plant closes, there will be no liquefied natural gas (LNG) export facilities remaining in North America. There are currently several import facilities, which are designed to "re-gasify" LNG, but no other liquefying facilities outside of the one in Alaska.

There are plans to build a new facility in Louisiana, as well as one in Kitimat, on BC's north coast. The proposed plant in Kitimat would be fed via a pipeline from the gas fields in the northeast. At the Kitimat facility, the gas would be compressed into liquid form to enable ocean transport, mainly to destinations in Asia. If built, the Kitimat plant would be the only LNG export facility on the west coast of North America (assuming the closure of the Alaska facility proceeds as planned).

The addition of an LNG export facility would expand the markets available to BC producers of natural gas. Currently, all gas exported from the province is destined for either the United States or Alberta. In 2010, about 34.8 billion cubic metres of natural gas were produced in British Columbia with an additional 1.4 billion cubic metres attained from imports or other sources.¹ Approximately 20% of the total 36.2 billion cubic metres was lost in the field, the plant or during distribution and export. Only 15% of the gas was distributed within the province and remaining 65% was exported. About

58% of exports were to the United States, with the remainder piped to Alberta.

Most of the natural gas produced in BC is exported either to the United States or Alberta



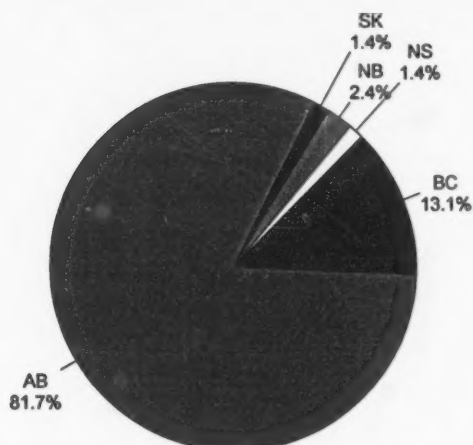
* Other includes gas retrieved from storage and other miscellaneous inputs
 * Loss includes field losses (i.e., flaring & meter differences) and loss during distribution and export

Source: Ministry of Energy and Mines

Although a fairly large proportion of BC's gas is shipped there, Alberta is by far the most significant producer of natural gas in Canada. BC currently ranks well behind Alberta in terms of international exports (i.e., to the United States). In 2010, approximately 13% of the volume of natural gas exported to the US from Canada was sourced in British Columbia. Alberta was the source of most of the natural gas shipped to the US, with almost 82% of Canada's natural gas exports originating in that province. New Brunswick, Nova Scotia and Saskatchewan were responsible for just over 5% of the country's natural gas exports.

¹ The source of production and distribution data is the BC Ministry of Energy and Mines.

BC ranked a distant second to Alberta in terms of volume of natural gas exports to the US in 2010



Source: Statistics Canada

While an export facility in Kitimat would open up BC's markets for natural gas to overseas destinations and potentially increase the province's share of Canada's total natural gas exports, there is some question as to whether or not such a facility would be able to compete with other gas exporters.

The fact that the LNG facility in Alaska is shutting down because it cannot compete with offshore gas producers may give pause to the proponents of the Kitimat plant, but the initial planned capacity for the Kitimat operation is more than three times the size of the Alaska plant, with plans to double that capacity in the future. The greater size could give Kitimat LNG more power to negotiate higher contracted prices compared to the Alaska plant. Nevertheless, there is growing competition from overseas as Australia, already a significant player in the LNG market, has more facilities coming online in the next few years.

There are some demand pressures that could boost the case for a new facility in Kitimat. Specifically, the recent earthquake in Japan that damaged some of the country's nuclear power plants has increased the demand for LNG as a replacement fuel. The problems at Japan's nuclear plants could also renew opposition to nuclear power worldwide, which may cause a shift toward natural gas as an energy alternative.

In addition, China is looking to reduce greenhouse gas emissions by moving away from using coal and switching to natural gas. India is another country with growing demand for LNG. Given the huge population that these two countries represent, there is the potential for substantial growth in demand for natural gas, which would certainly work in favour of Kitimat LNG. The decision on whether or not to go ahead with the Kitimat LNG facility will likely be made before the end of the year.

Given the increased production of shale gas in the US and the likelihood that American demand for imported gas will drop as a result, there could be a significant decline in BC's natural gas exports. An export facility that will enable overseas transport could help offset some of the drop in exports to the US by opening up new markets for BC's natural gas.

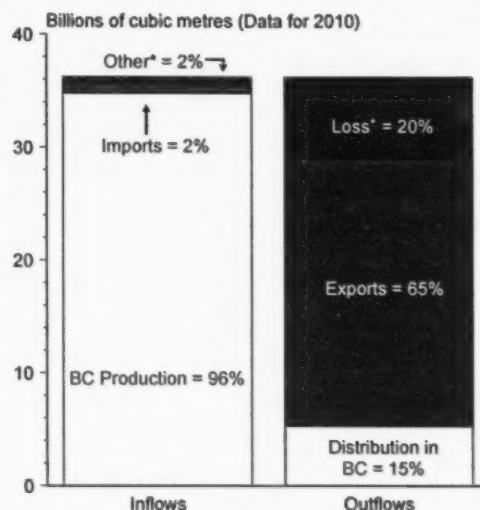
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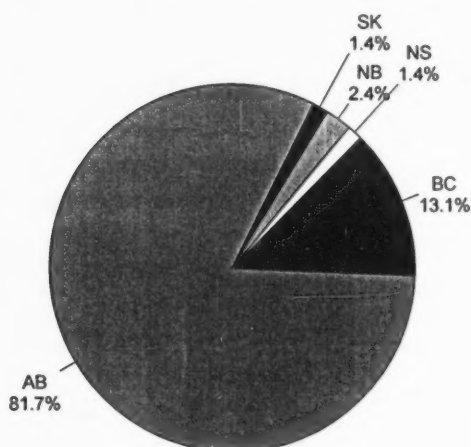
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